POLICE AND FIRE RETIREMENT SYSTEM OF SPRINGFIELD, MO
840 Boonville
Springfield, Missouri 65801
Voice Mail (417) 831-8901
Box Number 44140

Minutes
September 21, 2009

1. Call to Order

Homan called the meeting to order at 5:05 p.m. Minutes taken by White.

Attendance

Members	Representation	Present	Absent
Ken Homan	Chairman	X	
Beau Barrett	Citizen		X
David Carter	Fire	X	
Jim Edwards	Police	X	
Steve Fenner	Citizen	X	
David Hall	Fire	X	
Ron Hoffman	Retiree	X	
Evelyn Honea	Deputy City Manager		X
Sheila Maerz	Human Resources		X
Mary Mannix-Decker	Finance	X	
Jim McCulloch	Police		X
Cindy Rushefsky (NV)	City Council Liaison	X	
Dan Wichmer (NV)	Law		X
Nikki White (NV)	Secretary	X	

NV = Non-voting

Michael Zwiener of Milliman was also present.

Review of Experience Study as of June 30, 2009

Homan stated that this was a special meeting for the purpose of considering Milliman's recommendations as to the assumptions that will be considered and go into the valuation report. The valuation report will be complete within 10 days after confirmation of the assumptions.

Homan turned the meeting over to Michael Zwiener of Milliman.

Zwiener presented and reviewed the Experience Study as of June 30, 2009 (copy on file). He began with stating that the actuarial valuation results based on the current assumptions set are presented in the report. He added that the June 30, 2009 valuation results based on new, proposed assumption set will be provided as soon as possible after the board approves the changes set forth in the report. He said the analysis was performed with the idea that the fund would continue as is. If something major were to happen such as closing the fund to new members or something of that nature that would call for relooking at the assumptions.

Analysis of Individual Assumptions

Zwiener noted that the true cost of a retirement fund is the amount of benefits paid plus the administrative expenses minus the investment income earned.

Rate of Investment Return (pg. 5)

The investment return assumption that is used has the most significant impact on the actuarial numbers. The current assumption is 7.5%. The methodology that's prescribed to analyze the assumption is past experience. Zwiener explained the chart on page 5. MVA is market value of assets, AVA is the smooth actuarial value of assets. He pointed out that the MVA for 2008 and 2009 were negative. He said that this was obviously not favorable, but not out of line with other funds.

Zwiener stated that future expectations must also be taken into consideration. Each asset class is reviewed taking into consideration the target allocation, capital market assumption and the rate of return. After review, 8.3% was determined the expected annual return before investment expenses and 8.0% when reduced by 0.3% of investment expenses.

Zwiener added that a more rigorous exercise is to utilize a stochastic model. Many trials of the model are run, using the given asset allocation, capital market assumptions and the correlation factors. Each trial results in a return number for the fund as a whole. These results are then assembled, in order, from lower to highest results. Using a 20-year time horizon, the returns at the 25th and 75th percentiles are 5.93% and 9.44% respectively. A return of 7.80% was ranked at the 52nd percentile. Making the allowance of 0.30% for investment expenses, 7.50% is very near the mid-point of the results generated by the stochastic model. The reason he's spending time going over this is because he cautions on putting too much weight on recent experience. Milliman's recommendation is to retain the current investment return assumption of 7.5%.

Hall made a motion to accept the recommendation of retaining the current investment return assumption of 7.5%. 2nd by Hoffman. Vote all: Yes.

Salary Increases (pg. 8)

Zwiener stated that this assumption probably has the second most impact on the annual cost. His assumption was designed to try to match the merit raise structure that's currently in place. They also reviewed the past experience utilizing the average compensation increases since 2005. They only look at employees who are there at the beginning of the year and at the end of the year. They are looking at dollars versus percentages.

The 4.50% increase assumption for the fire members with 7-10 years of service and police members with 9-12 years of service is quite close to the actual experience of 4.75% and 4.69% respectively. Average salary increases over the past five plan years have been lower than the assumed 7.50% for fire members with 1-6 years of service and (6.74%) and police members with 1-8 years of service (5.70%), while they have been higher than the assumed 3.00% for fire members with 11 more years of service (3.66%) and police members with 13 or more years of service (3.75%). The recommendation is to retain the current salary increase assumption taking into account the past experience as well as the merit structure.

Further Analysis – pay received in the year of retirement does not enter into the above analysis since the analysis only considers a member who is active at both the beginning and end of the year. Milliman examined approximately 60 new age/service retirees who retired during the five years ending June 30, 2009 and found that the in-pay benefits was, on average, 10% higher than we had assumed. This was traced to pay in the final year being high enough to raise the final average earnings by 10% over what final average earnings would have been if final year pay was in line with the current base assumption. A provision was made in the current assumptions for this final year increase, but it is understating the actual experience that has unfolded during the study period.

Milliman's recommendation was: For Fire, increase the adjustment factor to the average salary at retirement from the current 3% to 9%. For Police, triple the assumed amount of accrual paid out from their continuous operating holiday balance at retirement.

Homan asked Zwiener if the 9% fully compensates for what the experience has been the last five years or does it just move towards it. Zwiener said the 9% doesn't get it part way there, it gets it all the way there. Homan asked if there had been any research done that indicates this will continue for the next five years or even 10 years. Zwiener said that in the 50 or so that were evaluated in 2004, they thought they had done a reasonable job hitting the number, but they under provided for it. Looking at the current group of 60 this is what it would take to avoid actuarial loses being generated. Zwiener added that it's hard to say if there are anomalies when there are only 60 retirees that were examined and there have also been a significant number of retirees in the last year or two. He doesn't think there's enough experience to second guess what he's actually seeing.

Homan stated that there were more retirees in the last year or two that had large accumulated vacation balances. He asked if anyone had data to show that the next five years might be different. Hall said he looked at the fire leave balance report and fire is down to 14 people that have more than the two year accumulation. He said of those all of them have been reducing theirs down with the exception of five. Hall added that a lot of people left because they were fearful of what would happen and particularly the ones with high leave balances. There are still some with high balances, but several have left. He said they will always have, even with the new hires, two years of accumulation being able to be sold out. Zwiener asked if there was an age that a higher provision could be used. Hall replied that he would rather see an overcompensation since there has been under compensation in the past. Hall thinks most of the 14 are close to age 45. Zwiener said he wouldn't have a problem using the recommended provision for those over 40 years of age and keeping the old provision for those under 40 for fire.

Edwards stated that he wasn't sure about the police numbers. He believes that the officers who have high balances are probably all over 40 years of age. Zwiener said he would be comfortable using 40 as a break point for police as well.

Hall made a motion to 1) retain the current salary increase assumption 2) for fire, increase the adjustment factor to the average salary at retirement from the current 3% to 9% for those over 40 years of age and retain the current rate for those 40 years of age and below 3) for police, triple the assumed amount of accrual paid out from their continuous operating holiday balance at retirement for those over 40 years of age and retain the current rate for those 40 year of age and below. 2nd by Carter. Vote all: Yes.

Rushefsky entered at 5:35 p.m.

Post Retirement Mortality (pg. 11)

Zwiener stated that since mortality is such a low frequency decrement, it requires the experience of a large population to provide credible experience. Even though the experience of the fund in considered, the group is not large enough to rely only on fund experience. He was expecting to see a relatively significant increase in cost.

The 83 GAM mortality table was widely used in pension funding at one time but is becoming more and more rarely used. Many pension funds that are not large enough to develop rates based on their own experience have adopted the RP-2000 mortality tables or variations thereof.

Zwiener stated the reason he expected the increase in cost is because the RP-2000 showed an increase male mortality rates particularly at the higher ages (pg. 12). However, what balances it out is the female mortality rates don't improve that much. Since there are significant survivor benefits in the fund, the mortality change didn't have as a significant impact as he was expecting. The cost impact raised it fairly nominally between 25 and 30 basis points. Milliman's recommendation is to update to the RP-2000 mortality tables.

Hall made a motion to accept Milliman's recommendation to update to the RP-2000 mortality tables. 2nd by Fenner. Vote all: Yes.

Disability Retirement (pg. 13)

Zwiener stated that the current disability assumption generates 16 expected disabilities for the period July 1, 2004 through June 30, 2009. Actual experience for the period produced 21 disabilities (18 of which are duty related). The assumption is that all disabilities are duty related because there isn't enough experience to start separating duty and non-duty.

In 2004, the rates were increased by 50%. The assumed rates continue to lag actual experience, especially at ages 41 and above, although by not as large a degree as was found in the 2004 study. Milliman's recommendation was that assumed disability incidence rate be increased by 10% for ages 41-45, 20% for ages 46-50 and 25% for ages 51-55 to bring expected disability incidence closer to the emerging experience. Zwiener added that this took into consideration other pension funds as well as this fund's experience.

Carter made a motion to increase the assumed disability incidence rate by 10% for ages 41-45, 20% for ages 46-50 and 25% for ages 51-55. 2nd by Edwards. Vote all: Yes.

Turnover (pg. 14)

Zwiener stated that turnover refers to members who terminate from employment other than from death, disability or retirement. Turnover experience differs substantially between police and fire. The number of police members expected to leave through turnover during the period study was 67. The actual number was 77. The number of fire members expected to leave through turnover during the study period was 13. The actual number was 10. Lower assumed turnover rates will tend to increase current year contribution requirements while higher assumed turnover will decrease current year contribution requirements. Milliman recommends retaining the current turnover assumptions.

Hall made a motion to retain the current turnover assumptions. 2nd by Hoffman. Vote all: Yes.

Retirement Rates (pg. 15)

Zwiener stated that the expected number of retirements was 47 during the period from July 1, 2004 through June 30, 2009. During this period, 67 members retired (other than under the disability provisions). Of greater significance are the ages at which retirements are occurring. Rates of retirement at ages 45-52 are higher than assumed. The retirement experience over the past two years may be higher than what we expect to see on an ongoing basis. Significant changes to the current retirement rates are not necessary although minor modifications to the rates between ages 45-52 are recommended:

Retirement Ages	Current	Proposed
45	15%	20%
46	15%	20%
47	20%	25%
48	20%	25%
49	20%	25%
50	30%	30%
51	20%	25%
52	20%	25%

Hall made a motion to make the modification to the rates between ages 45-52 as listed above. 2^{nd} by Carter. Vote all: Yes.

Actuarial Methods and Procedures (pg. 16)

Zwiener stated that the recommended contribution to the fund each year is determined under the Entry Age Normal Cost Method. This is the sum of two pieces. 1) Normal Cost – this is the cost of the benefits assigned to the current year under the cost method, plus 2) Amortization of the Unfunded Accrued Liability (UAL). The UAL may be amortized on a level dollar basis or as a level percentage of payroll. Level dollar is similar to a home mortgage. Under the level percentage of payroll basis, the dollar amount of the amortization payment will grow from year to year as the payroll increases. Based on recent experience and expectations for future years, Milliman recommends that the aggregate payroll growth assumption be reduced from 4% to 3% per year. Zwiener said this impacts recommended contribution by over 5 percentage points which is very significant.

Current accounting rules allow a fund to amortize the UAL over a period of up to 30 years. The amortization period can be "closed" where the period is reduced by 1 year each year or it can be "open" where a new 30 year period is re-established each year. The fund is currently using the "open" method with a term of 30 years. The methodology of the open method is that pension funds are presumably going to continue indefinitely.

Milliman recommends the fund adopt a modified method where the term is established at 30 years in the June 30, 2009 actuarial valuation, reduced to 29 years in the June 30, 2010 actuarial valuation and so on until 25 years is reached in the June 30, 2014 actuarial valuation. Thereafter, the open method would be used with a 25 year term. This recommendation will not have any impact on the contribution requirement determined in the June 30, 2009 actuarial valuation. However, the dollar amount of the annual amortization payment will be about 3% higher than it otherwise would have been for each year that the amortization period reduces from 30 years. Zwiener added that just because the accounting rules let you use 30 years that doesn't mean it is necessarily the best match. Tier II full benefits are accrued over 25 years. The State of Missouri changed a few years ago that benefit improvements to Missouri funds need to be amortized over a 20 year period. All these things tell him that the board should work toward moving down the 30 year amortization. He recommends a stair step method versus all at once.

Homan referred to the move from 4% to 3% and asked if the reason there hasn't been significant payroll growth was because there have been less active members. Zwiener said headcount is down and also the retirees are being replaced by people with a lower pay rate. Homan added that if the main reason is headcount, then that is something that we would hope wouldn't continue. Zwiener stated that the 4% has been unrealistically high over the last several years and he can see that going to something less has a significant impact on the cost. He strongly recommends that something lower than 4% should be used for the payroll growth assumption so that amortization of the unfunded is strengthened. Zwiener added that the big step would be to go to level dollar.

Hall asked how much of the assumption looked at the current year or previous years. Zwiener said aggregate payroll for the last four years was consistently $23-24 million. Carter asked Mannix-Decker her opinion. She stated that she agreed with Milliman's recommendation. She added that if the sales tax passes in November, that will get the fund back to where it needs to be, but will not allow for any additional growth. Homan stated that the bottom line is that the recommendation is to pay off the unfunded liability quicker than in the past. Zwiener said yes.

Rushefsky asked if the Experience Study would have to be redone if the sales tax passes in November. Zwiener said there would then be contributions in excess of the actuarial recommended amount and would allow us to make headway on the UAL. If Tier II got into LAGERS and there is no longer anyone that will be coming into this fund, he would recommend that unfunded amortization go to a level dollar basis. Zwiener said he wouldn't need to redo the entire study, but would go to a level dollar basis. He would also look at the asset allocation if it were revised by the board and perhaps have a change in the investment return assumption.

Rushefsky exited at 6:20 p.m. and did not return.

Hall made a motion 1) that the aggregate payroll growth assumption be reduced from 4% to 3% per year 2) that the fund adopt a modified method where the term is established at 30 years in the June 30, 2009 actuarial valuation, reduced to 29 years in the June 30, 2010 actuarial valuation and so on until 25 years is reached in the June 30, 2014 actuarial valuation. 2nd by Carter. Vote all: Yes.

<u>Asset Smoothing Method (pg. 17)</u>

Zwiener stated that there is a smooth value of assets and a market value of assets. Presumably they don't differ by much from year to year. The smoothing method recognizes market gains or losses, but spreads them out over four years. In 2007, market and smooth were the same. The extreme nature of recent investment losses has resulted in a smoothed asset value that is 31% higher than market value as of June 30, 2009. This is a result that lots of funds are seeing and caused them to stop and think about if it makes sense. Some funds have "corridors" around market value, requiring that the smoothed value may not be set a percentage (such as 20%) greater or less than market. This fund does not have any such corridor limits. The other side that they look at is by its very definition of smoothing, the smoothing method is going to do exactly what it is there for. He added that many funds that have a corridor have waived it because they need the effect of the full smoothing method. Zwiener said if there's any time that a smoothing method is needed it is right now because of the losses that have occurred.

In each of the next three years, another $8.8 million of investment loss that was suffered at June 30, 2009 will be recognized in the actuarial value of assets. Thus, it will require that the fund will have to return significantly higher than 7.5% per year on market value over the next few years in order to generate a 7.5% return on the smoothed value of assets. The other option would be to recognize the loss all at once which is not recommended. Milliman recommends not making any change to the asset smoothing method at this time.

Zwiener concluded his report.

Homan asked if Zwiener had any comments regarding what happens if the fund closes. Zwiener stated that the amortization of the unfunded would need to go to a level dollar methodology.

Zwiener said the actuarial would be complete on September 28, 2009. Homan said that it would be discussed at the October board meeting.

Adjournment

Homan asked for a motion to adjourn the meeting. Motion by Hall; 2nd by Carter. Vote all: Yes.

The meeting was adjourned at 6:35 p.m. on September 21, 2009.

 Secretary Signature: Nikki White